

APPENDIX D.

Noxious Weed Management and Rehabilitation Plan

Noxious Weed Management and Rehabilitation Plan

SFPP East Line Expansion Project El Paso to Phoenix

Prepared for
**Bureau of Land Management
SFPP, L.P.**

March 2004



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Definitions

Exotic Plants	Species not indigenous to a given area prior to European settlement.
Native Plants	Species that are indigenous to a given area prior to European settlement.
Noxious Weeds	Species identified by public law as exerting substantial negative environmental or economic impact. Noxious weeds are a subset of exotic plants. The term “noxious weeds” is a legal classification, not an ecological term. Noxious weed lists for the states of Texas, New Mexico and Arizona are provided in a table at the end of this document.

SECTION 1

Statement of Purpose

SFPP, L.P. is committed to preventing the spread of noxious weed along lands disturbed by its pipe line installation activities. The Application solicited comments from Bureau of Land Management (BLM) State Weed Coordinators along the proposed route. Comments received were incorporated into this Management and Rehabilitation Plan, which lists measures that will be implemented by SFPP to control noxious weeds the proposed project ROW.

SECTION 2

Background and Existing Environment

Exotic plants are often early-successional, pioneer species that are very successful at colonizing disturbed area. They typically produce large quantities of easily-dispersible seeds that establish quickly and grow to out-compete natives for water, nutrients, and other resources. They may also spread vegetatively following disturbance. Some exotic plants, in particular many noxious weeds, can become established without soil disturbance. Once introduced into an area, these species can invade intact vegetative cover and displace native plants.

Disturbed areas such as road ROWs often harbor exotic plant species, including noxious weeds. Since the proposed pipeline will occur within previously disturbed ROW, exotic plants including noxious weeds are already present along portions of the route.

SECTION 3

Determination

The proposed action will take place within some areas of known noxious weed populations, and will cause additional soil disturbance. Therefore, it has potential to contribute to the spread of noxious weeds in some areas in the absence of appropriate prevention measures. The risk factor for noxious weed spread by the proposed project has been determined to range from low to moderate.

The risk for noxious weed spread is low in areas along the route in which noxious weeds are present adjacent to, but not within, the proposed alignment. The risk for noxious weed spread is moderate in areas along the route in which noxious weeds are located immediately adjacent to or within the proposed alignment.

SECTION 4

Prevention Measures

The construction contractor will take the following measures to minimize the risk of noxious weed spread.

4.1 Communication with Agencies

- The contractor will contact relevant BLM State Weed Coordinators prior to starting work in each area to discuss specific noxious weed concerns and requirements. Contact names and phone numbers are included in Table 1 at the end of this document.
- The contractor will wash vehicles (see below) after crossing through areas of known weed infestations as determined by agency personnel.
- The contractor will use approved seed mixes for reseeding (see below) as determined by agency and county personnel where reseeding is required.

4.2 Vehicle Washing

- The contractor will wash construction equipment prior to entering each state if coming from out of state, with the exception of moving equipment across the New Mexico/Arizona state line within the Segment 2 ROW.
- The contractor will wash vehicles periodically during construction. Frequency of washing will depend on frequency of weed populations encountered as determined by land management agency personnel. At a minimum, vehicles and construction equipment will be washed before entering the project site for the first time.
- All washing of construction equipment will take place within an approved washing station.

4.3 Construction Techniques

- Ground disturbance will be minimized by the use of the least intrusive construction technique practicable for a given location.
- Off-ROW travel will not be allowed
- The contractor will avoid transporting contaminated materials, such as soils, gravel, mulch, hay/straw and sand.
- Hay and straw used for mulching will be certified by the pertinent state as free as of any noxious weeds.

4.4 Revegetation

- The contractor will reseed disturbed areas as directed by the land management agency with jurisdiction.

- The contractor will use native seed mixes tested free of weed seed for revegetation. No species on the "State Noxious Weed List" will be included in revegetation seed mixes.
- The contractor will confer with the jurisdictional land management agency personnel to determine appropriate seed mixes where reseeding is required. The contractor will use mixes or species recommended by agency personnel within each weed district where available. Native species will be used except in cases where non-persistent exotic species are preferable in order to establish vegetative cover quickly.

SECTION 5

Monitoring and Control

The environmental compliance monitors designated for this project will be qualified to identify the presence or absence of noxious weeds along the proposed route, and existing population of weed infestations will be identified prior to construction. The weed monitor will keep ahead of construction crews to identify areas to avoid or areas of concern. Areas where noxious weeds are prevalent will be flagged so that they are easily identifiable.

TABLE 1
State Noxious Weed Contacts

State	Contact Name	Contact Phone
Texas	Awinash Bhatkar	(512) 463-5025
New Mexico	Bernie Chavez	(505) 438-7668
Arizona	Gina Ramos	(602) 417-9246

TABLE 2
Texas Noxious Weeds (Category Definitions: S1=Prohibited noxious weed seed: highly destructive and difficult to control by ordinary good cultural practice. S2=Restricted noxious weed seed: objectionable in field, lawns, and gardens, but can be controlled by good cultural practices.)

Common Name	Latin Name	Category
Goatgrass	<i>Aegilops sp.</i>	S2
Corncockle	<i>Agrostemma githago</i>	S2
wild onion	<i>Allium spp.</i>	S2
wild oat	<i>Avena fatua</i>	S2
feral oat	<i>Avena sp.</i>	S2
wild mustards	<i>Brassica spp.</i>	S2
hairy chess	<i>Bromus commutatus</i>	S2
cheat	<i>Bromus secalinus</i>	S2
hedge bindweed	<i>Calystegia sepium</i>	S1
balloonvine	<i>Cardiospermum halicacabum</i>	S1
Russian knapweed	<i>Centaurea repens</i>	S2
Canada thistle	<i>Cirsium arvense</i>	S2
blessed thistle	<i>Cnicus benedictus</i>	S2

TABLE 2

Texas Noxious Weeds (Category Definitions: S1=Prohibited noxious weed seed: highly destructive and difficult to control by ordinary good cultural practice. S2=Restricted noxious weed seed: objectionable in field, lawns, and gardens, but can be controlled by good cultural practices.)

Common Name	Latin Name	Category
field bindweed	<i>Convolvulus arvensis</i>	S1
dodder (other than native spp.)	<i>Cuscuta spp.</i>	S2
bermudagrass	<i>Cynodon dactylon</i>	S2
yellow nutsedge	<i>Cyperus esculentus</i>	S1
purple nutsedge	<i>Cyperus rotundus</i>	S1
nutsedge	<i>Cyperus spp</i>	S1
wild carrot	<i>Daucus carota</i>	S2
quackgrass	<i>Elytrigia repens</i>	S2
Texas blueweed	<i>Helianthus ciliaris</i>	S2
morningglory	<i>Ipomoea spp.</i>	S2
Persian darnel	<i>Lolium persicum</i>	S2
poison ryegrass	<i>Lolium temulentum</i>	S2
serrated tussock	<i>Nassella trichotoma</i>	S1
red rice	<i>Oryza sativa</i>	S2
passion flower/maypop	<i>Passiflora incarnata</i>	S2
bracted plantain	<i>Plantago aristata</i>	S2
buckhorn plantain	<i>Plantago lanceolata</i>	S2
annual bluegrass	<i>Poa annua</i>	S2
wild radish	<i>Raphanus raphanistrum</i>	S2
castorbean	<i>Ricinus communis</i>	S1
itchgrass	<i>Rottboellia cochinchinensis</i>	S1
giant foxtail	<i>Setaria faberi</i>	S2
blessed milkthistle	<i>Silybum marianum</i>	S2
Carolina horsenettle	<i>Solanum carolinense</i>	S2
silverleaf nightshade	<i>Solanum elaeagnifolium</i>	S2
tropical soda apple	<i>Solanum viarum</i>	S1
Johnsongrass	<i>Sorghum halepense</i>	S2
puncturevine	<i>Tribulus terrestris</i>	S2
pocklebur	<i>Xanthium spp.</i>	S1

The New Mexico Department of Agriculture has selected the following plant species to be targeted as noxious weeds for control or eradication pursuant to the Noxious Weed Management Act of 1998.

New Mexico's noxious weed list is classified into three divisions: Class A, Class B, and Class C weeds, all of which are non-native to New Mexico. Class A weeds are species that currently are not present in New Mexico or have limited distribution; preventing new infestations of these species and eradicating existing infestations is the highest priority.

Class B weeds are species that are limited to portions of the state. In areas that are not infested, these species should be treated as class A weeds. In areas with severe infestations, management plans should be designed to contain the infestation and stop any further spread.

Class C weeds are species that are wide-spread in the state. Management decisions for these species should be determined at the local level based on feasibility of control and level of infestation.

This list does not include every plant species with a potential to negatively impact the state's environment and economy. Vegetation managers are also encouraged to recognize plant species listed on the federal noxious weed list or other western states noxious weed lists as potentially having negative impacts and to manage them accordingly.

TABLE 3
New Mexico Noxious Weeds

Common Name	Latin Name	Class
Alfombrilla	<i>Drymaria arenarioides</i>	A
Black henbane	<i>Hyoscyamus niger</i>	A
Camelthorn	<i>Alhagi pseudalhagi</i>	A
Canada thistle	<i>Cirsium arvense</i>	A
Dalmation toadflax	<i>Linaria genisitifolia</i> spp. <i>dalmatica</i>	A
Diffuse knapweed	<i>Centaurea diffusa</i>	A
Dyer's wood	<i>Isatis tinctoria</i>	A
Eurasian watermilfoil	<i>Myriophyllum spicatum</i>	A
Hoary cress	<i>Cardaria draba</i>	A
Hydrilla	<i>Hydrilla verticillata</i>	A
Leafy spurge	<i>Euphorbia esula</i>	A
Onionweed	<i>Asphodelus fistulosus</i>	A
Perennial pepperweed	<i>Lepidium latifolium</i>	A
Purple loosestrife	<i>Lythrum salicaria</i>	A
Purple starthistle	<i>Centaurea calcitrapa</i>	A
Scotch thistle	<i>Onopordum acanthium</i>	A
Spotted knapweed	<i>Centaurea maculosa</i>	A
Yellow starthistle	<i>Centaurea solstitialis</i>	A
Yellow toadflax	<i>Linaria vulgaris</i>	A
African rue	<i>Peganum harmala</i>	B
Bull thistle	<i>Cirsium vulgare</i>	B
Halogeton	<i>Halogeton glomeratus</i>	B
Malta starthistle	<i>Centaurea melitensis</i>	B
Musk thistle	<i>Carduus nutans</i>	B
Russian knapweed	<i>Acroptilon repens</i>	B
Poison hemlock	<i>Conium maculatum</i> L.	B
Teasel	<i>Dipsacus fullonum</i>	B
Field bindweed	<i>Convolvulus arvensis</i> L.	C
Jointed goatgrass	<i>Aegilops cylindrical</i>	C
Russian olive	<i>Elaeagnus angustifolia</i> L.	C
Saltcedar	<i>Tamarix</i> sp.	C
Siberian elm	<i>Ulmus pumila</i>	C

TABLE 4

Arizona Noxious Weeds (Category Definitions: 1=Regulated noxious weed which is well established and generally distributed in Arizona. 2=Restricted noxious weed which occurs in isolated infestations or very low populations. 3=Prohibited noxious weed which does not occur in Arizona)

Common Name	Latin Name	Category
puna grass	<i>Achnatherum brachychaetum</i>	3
jointed goatgrass	<i>Aegilops cylindrica</i>	2
camelthorn	<i>Alhagi maurorum</i>	2
alligator weed	<i>Alternanthera philoxeroides</i>	3
lens podded hoary cress	<i>Cardaria chalepensis</i>	3
hoary cress	<i>Cardaria draba</i>	2
hairy whitetop	<i>Cardaria pubescens</i>	3
Cardaria complex (combined)	<i>Cardaria spp.</i>	2 or 3
plumeless thistle	<i>Carduus acanthoides</i>	3
field sandbur	<i>Cenchrus carolinianus</i>	1
southern sandbur	<i>Cenchrus echinatus</i>	1
purple starthistle	<i>Centaurea calcitrapa</i>	3
diffuse knapweed	<i>Centaurea diffusa</i>	2
Iberian starthistle	<i>Centaurea iberica</i>	3
spotted knapweed	<i>Centaurea maculosa</i>	2
Russian knapweed	<i>Centaurea repens</i>	2
yellow starthistle	<i>Centanurea solstitialis</i>	2
Sicilian starthistle	<i>Centaurea sulphurea</i>	3
squarrose knapweed	<i>Centaurea triumphettii</i>	3
rush skeletonweed	<i>Chondrilla juncea</i>	3
Canada thistle	<i>Cirsium arvense</i>	3
field bindweed	<i>Convolvulus arvensis</i>	1
creeping wartcress	<i>Coronopus squamatus</i>	3
dudaim melon	<i>Cucumis melo</i>	3
other than native spp (dodder)	<i>Cuscuta spp.</i>	2
sandy drymaria	<i>Drymaria arenarioides</i>	3
peacock hyacinth	<i>Eichhorina azurea</i>	3
floating waterhyacinth	<i>Eichhornia crassipes</i>	2
quackgrass	<i>Elytrigia repens</i>	2

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Common Name	Latin Name	Category
leafy spurge	<i>Euphorbia esula</i>	3
halogeton	<i>Halogeton glomeratus</i>	2
Texas blueweed	<i>Helianthus ciliaris</i>	2
waterthyme	<i>Hydrilla verticillata</i>	3
morningglory	<i>Ipomoea spp.</i>	3
three-lobed morning glory	<i>Ipomoea triloba</i>	2
dyer's woad	<i>Isatis tinctoria</i>	3
Dalmatian toadflax	<i>Linaria dalmatica</i>	2
purple loosestrife	<i>Lythrum salicaria</i>	3
burclover	<i>Medicago polymorpha</i>	1
serrated tussock	<i>Nassella trichotoma</i>	3
Scotch thistle	<i>Onopordum acanthium</i>	2
branched broomrape	<i>Orobanche ramosa</i>	3
torpedo grass	<i>Panicum repens</i>	3
African rue	<i>Peganum harmala</i>	3
kikuyugrass	<i>Pennisetum clandestinum</i>	3
common purslane	<i>Portulaca oleracea</i>	1
Austrian fieldcress	<i>Rorippa austriaca</i>	3
tansy ragwort	<i>Senecio jacobaea</i>	3
Carolina horsenettle	<i>Solanum carolinense</i>	3
perennial sowthistle	<i>Sonchus arvensis</i>	3
witchweed	<i>Striga spp.</i>	3
water chestnut	<i>Trapa natans</i>	3
puncturevine	<i>Tribulus terrestris</i>	1